

ART. II.—*On the Occurrence of Certain Fish in Victorian Seas, with Descriptions of some New Species.*

(With Plate III.)

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I.—*Fish collected by Mr. J. Bracebridge Wilson, in his Dredging Excursions during the summer of 1887–8.*

(1) *Hippocampus breviceps*, Peters.

This little fish was found in abundance near Port Phillip Heads, by Mr. Wilson. We have also met with it on weed at nearly all our dredging stations in the Bay.

(2) *Hippocampus abdominalis*, Kaup.

Mr. Wilson forwarded one specimen from the Straits.

(3) *Syngnathus phillipi*, nobis.

Obtained by Mr. Wilson at nearly all the outer stations of Port Phillip in large numbers. A description is appended.

(4) *Chilobranchius rufus*, Macleay.

Very abundant at all stations near the Heads. Found also freely at Cheltenham.

(5) *Cristiceps australis*, Cuv. et Val.

Taken by Mr. Wilson at stations near the Heads in great abundance. I consider *C. howittii*, Castelnau, to be a form of *C. australis*.

(6) *Cristiceps wilsoni*, nobis.

Met in company with *C. australis*; abundant.

(7) *Cristiceps phillipi*, nobis.

With *C. wilsoni* and *C. australis*, but only three specimens forwarded. Descriptions of (6) and (7) are appended, as also outline figures.

- (8) Two species of *Gobius*, not yet determined, but probably new.
- (9) A single specimen of a fish belonging to the Labridæ. It is probably new, but more material is necessary for a proper description to be given.

II.—*Fishes obtained in the Port Phillip Biological Survey, Dredging, or Short Excursions.*

- (1) *Pegasus lancifer*, Kaup. From Sandridge.
- (2) *Stigmatophora argus*, var. *brevicauda* data, nobis. From Geelong Inner Bay.
- (3) *Sticharium dorsale*, Günther. From Laverton Bay; abundant.
- (4) *Clinus despicillatus*, Richardson. From Portarlington and Sandridge.
- (5) *Callionymus*, sp. From Geelong.
- (6) One specimen of *Gobiesox*, sp. From Brighton.

III.—*Fish obtained by Mr. J. Bracebridge Wilson, in the summer of 1888–9.*

In addition to those previously received from Mr. Wilson, were—

- (1) *Mordacia mordax*, Gray. One specimen; young.
- (2) *Sticharium dorsale*, Macleay.
- (3) *Tripterygium macleayanum*, nobis.
A single specimen; description and figure appended.
- (4) *Syngnathus semi-fasciatus*, Günther.
A single but large and typical female specimen.
The colours exactly correspond with those given by Count Castelnau. P.Z.S. Vict., Vol. I, p 199.
- (5) *Hippocampus*, sp.
I have not yet been able to satisfy myself as to the identity or novelty of this handsome specimen.
- (6) *Pristiophorus cirratus*, Latham.
A male specimen, 33 inches long.

(7) *Urolophus cruciatus*, Lacep.

Two male specimens, 11 inches and 6 inches long respectively. The younger showing the pattern of the colour markings very clearly.

(8) *Rhina squatina*, L.

A young female, 11 inches long.

(9) *Ostracion auritus*, Gray.

Two specimens, 7 and 7½ inches long respectively.

IV.—*Fish Trawled in Bass' Straits by the Government Steamer, "Lady Loch," in July 1889. Depth 10–39 fm.*

(1) *Upeneichthys porosus*, Cuv. et Val. (sp.)

One specimen. Between Belfast and Warrnambool, 25–27 fm.

(2) *Monacanthus rudis*, Richardson. One specimen.

(3) *Monacanthus güntheri*, Macleay. One specimen.

(4) *Cyttus australis*, Richardson. Two specimens, both young.

(5) *Trigla polyommata*, Richardson. One young specimen.

(6) *Lepidotrigla vanessa*, Richardson. One specimen.

(7) *Ostracion auritus*, Shaw.

Two specimens, each about 5½ inches long.

(8) *Cristiceps australis*, Cuv. et Val. One specimen.

(9) *Pempheris macrolepis*, Macleay.

A number of these fish were obtained between Portland and Belfast. The sailors called them Galldie. Only one specimen was forwarded. They do not often come to market. I have never seen one there.

Cristiceps wilsoni, n. sp.

D. 3/27·28/3. A. 2/21. V. 3. About two inches long.

Body compressed; height, one-fourth to one-fifth of total length. First dorsal inserted over operculum, rather longer than earlier rays of second dorsal. Ventrals not quite reaching to vent; caudal rounded; principal caudal rays, 11.

Second dorsal attached by membrane to base of caudal; anal free from caudal. Clear membrane between the first and the last two of the soft dorsal rays. Scales small, distinct. Lateral line continuous, with the curve usual in the genus.

Profile of head and snout convex; lower jaw slightly protruding; diameter of eye greater than length of snout. Supra-orbital tentacles red, simple, nearly as long as diameter of eye; snout tentacles pale, small, jointed.

Colour variable, as probably in all the species of the genus. Body colour reddish, with a number of vertical dark red-brown to rose-coloured bands, which may or may not be continued over the vertical fins. The first band incomplete below the first dorsal, two others on the trunk, and four on the tail. Colour-markings of head inconstant.

Dredged at several stations near Port Phillip Heads, by J. Bracebridge Wilson, to whom I have great pleasure in dedicating the species.

In a single specimen are found the following characters which I record, but do not wish to establish a new species. The present state of our knowledge of the species of this genus is eminently unsatisfactory, and the limits of variation have scarcely been considered:—

D. 3/24/3. A. 2/17. V. 3.

Body compressed; height $4\frac{1}{3}$ in total length. Length $\frac{1}{2}$ 58 mm.

First dorsal situated above operculum; rays equal, not exceeding those of second dorsal. Ventrals reach about half-way to vent. Second dorsal united to base of caudal; anal free; scales minute and distinct. Supra-orbital tentacles simple, red; snout tentacles short, pale. Colour reddish, with vertical rows of interrupted black and yellow blotches. Vertical fins, with corresponding red bands; short white band from orbit across præoperculum.

This specimen is figured in Plate III, Fig. 1.

Cristiceps phillipi, n. sp. Three specimens.

(a) D. 3/30/2. A. 2/23. V. 2.

Snout rather pointed. First dorsal over operculum; second ray longest; third shortest; clear membrane between the two soft rays. Scales distinct; lateral line distinct anteriorly. Height about four times in total length. Pectorals nearly to vent; ventral rays long, slender; anal free from caudal. Supra-orbital and snout tentacles very short and small. Colours ill-defined in spirit specimen.

Length 67 mm. Dredged Port Phillip Heads, by J. B. Wilson, 1888-9.

This specimen is figured in Plate III, Fig. 2.

(b) D. 3/30/3. A. 2/23. V. 2.

First dorsal over operculum; first and second rays much longer than third; clear membrane between the soft rays. Scales distinct. Pectorals to vent; ventral rays long, slender. Height nearly five times in total length. Supra-orbital tentacles aborted, and snout tentacles short, but distinct. Colour, few vertical dark bands; white band from eye across præoperculum and operculum, continued along trunk and tail, below the lateral line to the root of the caudal. Length 53 mm. Dredged at Port Phillip Heads by J. B. Wilson, 1888-9.

Tripterygium macleayanum, n. sp.

D. 3/14/12. A. 22. L. lat. 25. L. tr. 3/1/8. P. 15. V. 2.

Height of body rather less than length of head, and about equal to length of tail-fin. Length of head constituting about two-sevenths of combined length of head and trunk, without caudal fin. Insertion of ventrals half-way between tip of snout and vent. Pectorals reaching nearly opposite to end of second dorsal. Scales with fine toothed edges. Lateral line distinct to opposite the fourth ray of the third dorsal. Eyes large, diameter about one-third length of head. Short fringed tentacles above orbit and at outer side of nostril. Inter-orbital space concave, narrower than diameter of eye. Line of fringed papillæ above and behind orbit. Rows of finely-toothed scales on sides of occiput, upper edge of operculum, and front of præoperculum. Colour (spirit) orange, with broad, indistinct, red vertical bands; eyes red; vertical fins pale, with black margins. Length of single specimen, 50 mm. It is figured in Plate III, Fig. 4.

Dredged by J. B. Wilson near Port Phillip Heads, summer of 1888-9. Dedicated to the Hon. Sir William Macleay, author of "The Ichthyology of Australia."

Syngnathus phillipi, n. sp.

D. 25-26. Osseous rings 18 + 40-44, reckoning the complete ring which bears the pectoral fins as the first body ring.

Adults between four and five inches long. Length of snout, about half that of head. Length of trunk, about

twice that of head. Length of tail $1\frac{1}{2}$ to $1\frac{7}{8}$ that of head and trunk together.

The actual measurements of four specimens are—

	HEAD.—Snout.		Trunk.	Tail—Tail-fin.		Total Length.
<i>a</i> ♀	7.5	7.5	28	75	3	121 mm.
	15			78		
<i>b</i> ♂	5	6.5	22.5	62.5	2.5	99 mm.
	11.5			65		
<i>c</i> ♂	5.5	6	28	65	2.5	107 mm.
	11.5			67.5		
<i>d</i> ♀	6.5	6.5	27.5	59.5	2.5	102.5 mm.
	13			62		

Depth of trunk in males, one-fifth; in females, one-fourth of its length. Dorsal fin occupies about two body and six tail-rings; the egg pouch in the males extends over the first 15 to 18 tail-rings. Ridges very distinct on snout, rest of head, trunk, and tail.

A median dorsal on the snout, forking, opposite the middle of the eyes, into two low branches which join the supra-orbital behind the eyes. Supra-orbital prominent, converging in front of eyes to just reach the dorsal median of the snout, and continuing behind, as the upper lateral ridges of the head. Inter-orbital space concave; median ridge on crown of head extending, once interrupted, to terminate opposite the insertion of the pectoral fins. Nuchal lateral ridges continuous, with upper lateral edges of trunk; dorsal surface of neck much narrower than that of head or trunk; horizontal ridge across operculum; lateral ridges from tip of snout, diverging to the eye on either side. In the males there is a marked tetrahedral prominence on the ventral surface of the head, just behind the level of the eyes, formed at the point of union of the median ventral ridge of the snout, a transverse ridge along the origin of operculum on either side, and the median ventral ridge of the head, continuous with that of the trunk behind. This projection is quite wanting in the females.

Sides and back brown, with narrow, whitish, vertical bands near the front border of several of the lateral plates; under surface lighter. Keel of ventral ridge of trunk, black. Males darker. In some of the males, white spots instead of bands: in some of females, rows of black spots across operculum and on under surface of snout. Upper

surface of head, operculum, and snout, with irregularly white lines, bands, or patches, more or less conforming to the ridges.

Dredged at Port Phillip Heads by J. Bracebridge Wilson. Named from the locality.

Stigmatophora argus, Rich., var. *brevicauda* data.

D. 49 or 50. Osseous rings 20 + about 60.

Snout 17 mm. } Head 25 mm. Trunk 46 mm. Tail 87 mm.
Skull 8 mm. }

Dorsal spots black, without white edges. Green.

Differs from *S. argus* in relative length of tail, and in the absence of the white rings round the black spots. Spots arranged in six tolerably regular longitudinal series.

Dredged in seaweed, Geelong Inner, December 10, 1887.

Macleay's account of *S. argus*, Rich. T.Z.S. III, p. 183, Pl. 7, Fig. 2. Günther, Cat. VIII, p. 189.

D. 49-52. Osseous rings 20 + about 75.

Snout very long, about twice as long as the remaining part of the head. Operculum with a slight ridge in young examples, nearly entirely disappearing in old. Vent below the middle of the dorsal fin. Tail more than twice as long as the trunk; egg pouch shorter than the trunk. Upper parts with numerous small, black, white-edged ocelli, sometimes irregularly arranged, sometimes forming longitudinal or transverse series. Tasmania. Port Jackson.

EXPLANATION OF PLATE.

Outline figures of some new Victorian Blennies. All the figures are life size.

Fig. 1.—*Cristiceps wilsoni*, n. sp. The variety noted is the one figured, but the general outline is that of the species.

Fig. 2.—*Cristiceps phillipi*, n. sp.

Fig. 3.—*Cristiceps australis*, Cuv. et Val. A young specimen, drawn for purposes of comparison.

Fig. 4.—*Tripterygium macleayanum*, n. sp.
